

A KEY TO TROPICAL SPECIES OF *TRICORYNUS*, WITH
TAXONOMIC CHANGES (COLEOPTERA: ANOBIIDAE)

RICHARD E. WHITE

Systematic Entomology Laboratory, IIBIII, Agric. Res., Sci. and Educ.
Admin., USDA, % National Museum of Natural History, Washington, D.C.
20560.

Abstract.—Results of a study of the described Neotropical species of *Tricorynus* include four new synonyms, three changes in status, and 23 new combinations. New synonyms are: *T. herbarius* (Gorham) (= *Catorama maroniensis* Pic, n. syn.); *T. rubriventris* (Pic) (= *Catorama robustior* Pic, n. syn.); *T. wagneri* (Pic) (= *Catorama major* Pic, n. syn.); and *T. subglaber* (Pic) (= *T. depressus* White, n. syn.). *Tricorynus distinctus* (Pic), *T. subglaber* (Pic), and *T. longesulcatus* (Pic) represent changes of status. A key is given to the 30 described species, and a list is given of those species in the key with their synonyms. Lists of label data on type-specimens and of the 13 species and a subspecies of uncertain status are given and many are discussed. Most of the types of species described by Maurice Pic were studied.

The quality of the taxonomic work of Maurice Pic in the Coleoptera hinders study of faunas in which he described numerous species. Most of his publications consist of very brief, hastily composed descriptions that give but vague impressions of the beetles he had before him. Rarely can his names be assigned on the basis of these descriptions alone, and his notes that compare the new species with others are equally inadequate. Seldom are keys to species provided in his papers; illustrations are never included. This situation results in considerable mystery as to the correct assignment of Pic's names.

In 1977, I visited the Muséum National d'Histoire Naturelle in Paris, saw the types of most Pic species of Anobiidae, and borrowed a number of them; examination of these specimens has allowed assignment of many Pic names. My intent has been to revise certain tropical American genera of Anobiidae. Revisions of *Protheca* and *Stichtoptychus* (White, 1979a, 1980) have been published and a revision of *Cryptorama* is in preparation. Due to a change in direction of my research plans, I can attain only part of my goal of revising the *Tricorynus* by presenting a key to species.

The following key includes the Pic species whose types I have seen or which can be assigned on the basis of specimens identified by Pic. Also included are other species whose names can be assigned with certainty. Most species that have been treated in the three studies of *Tricorynus* faunas (i.e., White, 1965b, 1967, 1974) are not part of this work, because those have already been keyed and described. This excludes species occurring north of Guatemala and a single Chilean species.

Also included herein is a list of names of species that apparently belong in *Tricorynus* but which cannot be assigned with confidence because the descriptions are inadequate and no reliably identified specimens are available. Correct assignment of these names is a task for the future. I do, however, discuss the situation for most of these names.

Tropical species known to have been misplaced in *Catorama* (= *Tricorynus*) by Pic have been dealt with and placed in their correct genus in other publications (White, 1979a, 1979b, and 1980).

The literature contains no thorough morphological descriptions for most of the Pic species that are keyed in this paper. For that reason, a series of characters are included in most couplets to increase the likelihood that the species can be identified correctly.

The species here cited in combination with *Tricorynus* represent new combinations with the exception of the following: *distinctipennis* (Pic), *herbarius* (Gorham), *lepesmei* White, *neltumae* (Fisher), *robusticollis* (Pic), *tabaci* (Guérin), and *zeae* Waterhouse.

TAXONOMIC NOTES

Tricorynus herbarius (Gorham)

Cathorama herbarium Gorham, 1883: 207.

Catorama maroniensis Pic, 1927a: 8. NEW SYNONYM.

Close comparison of the type of *maroniensis* with a lengthy series of *herbarius* showed no reliable external differences to distinguish them, so the above change is necessary.

I erred (White, 1979b: 212) in listing *Catorama minasensis* Pic (1927a: 8) as a synonym of *T. herbarius*. The mistake resulted from examination of two specimens on one pin determined by Pic as *minasensis* and which bear (almost certainly in error) a red museum type label; these specimens are identical with *herbarius*. In error I accepted the Pic 1927a reference to *minasensis* as its original description, because there Pic neither referred to an earlier description nor made it clear that he was transferring *minasensis* (described by Pic, 1904b: 37) from *Eupactus* to *Catorama*. A discussion of the status of *minasensis* and the type-specimen will appear in a future paper on *Calymnaderus*.

Tricorynus rubriventris (Pic)

Cathorama rubriventris Pic, 1904c: 57.

Catorama robustior Pic, 1923: 5. NEW SYNONYM.

I have compared the lectotype of *C. robustior* (see below) with the holotype of *C. rubriventris* and found them to be the same species.

There is reason to question the accuracy of the locality Pic gave in the original description for *robustior*, for there are no collection data on the specimen, and it is clearly the same species as the type of *rubriventris*, which was collected in Mexico. In the original description of *robustior*, Pic gave the locality of collection as "Guyane Fr."; however, Pic (1927a: 8) gave the locality for *robustior* as "Colombie."

Though the head of the type of *rubriventris* is missing (evidently eaten by a dermestid), there is no doubt that it is the same species as *robustior*.

The pin bearing Pic's handwritten type label has four different specimens mounted on two cards. I select as the LECTOTYPE of *robustior* a specimen on the upper card and have written an "L" beneath it.

Tricorynus wagneri (Pic)

Catorama wagneri Pic, 1927b: 186.

Catorama major Pic, 1928a: 4. NEW SYNONYM.

While examining the Pic collection in Paris I found that a USNM specimen I had brought along agreed closely with the type of *T. wagneri*. Later I found another USNM specimen that agreed closely with the type of *T. major*. I have found no differences at the species level between these specimens that were compared with the respective types, so I here synonymize the two names.

Tricorynus subglaber (Pic), NEW STATUS

Cathorama rubriventris subglaber Pic, 1904c: 57.

Tricorynus depressus White, 1967: 8. NEW SYNONYM.

Though *subglaber* was described as a variety of *C. rubriventris*, the types of the two are sufficiently distinct as to leave no doubt that they are different species. I have compared the holotype of *subglaber* with specimens of *depressus* and found that they are the same species. The mere eleven words that validated *subglaber* did not allow it to be recognized.

Tricorynus distinctus (Pic), NEW STATUS

Catorama cribrata distincta Pic, 1905a: 92.

Comparison of Pic's types of *C. cribrata* and *C. distincta* showed that they are clearly two distinct species.

Tricorynus longesulcatus (Pic), NEW STATUS

Catorama argentina longesulcata Pic, 1928b: 50.

The differences between the type of *C. argentina longesulcata* Pic and a specimen that I compared with the type of *C. argentina* and which agreed very closely with it convince me that the two should be treated as distinct species.

KEY TO TROPICAL SPECIES OF *TRICORYNUS*

- 1. Elytron with no strongly impressed lateral grooves at apical ½ 2
- Elytron with 1 or 2 distinctly impressed lateral grooves at apical ½ 6
- 2(1). Head before each eye with a black, very coarsely punctate depression; Caribbean and Central America *tabaci* (Guérin)
- Head not as above 3
- 3(2). Elytron apically at side with a moderately distinct stria formed of large punctures; side of pronotum distinctly inflated; body 2× as long as wide; reddish brown throughout; pubescence tan; length 4.2 mm; Argentina *robusticollis* (Pic)
- Not as above 4
- 4(3). Metasternum depressed anteriorly and with a distinct, longitudinal carina; large elytral punctures more or less clearly aligned into rows; pronotum at side bulging above anterior margin; eyes separated by about 1.8× vertical diameter of an eye; length about 3.4–3.6 mm; Argentina *wagneri* (Pic)
- Metasternal and other characters not exactly as above 5
- 5(4). Elytral punctures obviously dual, dense, and aligned into longitudinal bands; middle tibia not grooved; eyes separated by about 1.5× vertical diameter of an eye; large punctures at side of pronotum separated by much less than diameter of a puncture; length 3.6 mm; Mexico *rubriventris* (Pic)
- Elytral punctures not dual, small and sparse, not aligned; middle tibia grooved; eyes separated by about 2.0× vertical diameter of an eye; large punctures at side of pronotum separated by about diameter of a puncture; length 3.7 mm; French Guiana *guyanensis* (Pic)
- 6(1). Elytron apically at side with but 1 distinctly impressed groove, or with lower groove much stronger than a 2nd, upper groove 7
- Elytron apically at side with 2 impressed grooves, about equally deep 11

- 7(6). Head just above eye level with a deep, arcuate, transverse groove; pronotum produced above anterior angle; pubescence with a golden reflection; elytron at apex with a fine, impressed groove, above it with a stria of aligned punctures; length 3.7 mm; Brasil *fulvopilosus* (Pic)
 - Not as above 8
- 8(7). Elytral apex at side with a 2nd upper groove or stria that is shorter and weaker than lower groove; length 2.2-3.0 mm 9
 - Elytral apex at side with but 1 groove; length 1.7-1.9 mm 10
- 9(8). Elytral apex at side with a 2nd, upper groove; metasternum carinate at middle; large elytral punctures separated on an average by a little over diameter of a puncture; eyes separated by about 1.7× vertical diameter of an eye; pronotum at side bulging; length 3 mm; Brasil *distinctus* (Pic)
 - Elytral apex at side with an upper stria formed of punctures; metasternum not carinate; large elytral punctures separated by 2-3× diameter of a puncture; pronotum at side not bulging; eyes separated by about 2.4× vertical diameter of an eye; length 2.2 mm; Peru *baeri* (Pic)
- 10(8). Eyes large, strongly bulging, separated by about 1.5× vertical diameter of an eye; Guadeloupe *lepesmei* White
 - Eyes smaller, weakly bulging, separated by nearly 2.0× vertical diameter of an eye; Brasil *unisulcatus* (Pic)
- 11(6). Anterior tibia with a single distinct groove; pronotum bulging above anterior margin; eyes separated by 1.6-1.8× vertical diameter of an eye; length 2.7-3.4 mm; Caribbean
 *neltumae* (Fisher)
 - Anterior tibia with 2 distinct grooves; other characters not as above 12
- 12(11). Metasternum distinctly, longitudinally carinate at middle; eyes separated by about 1.7× vertical diameter of an eye; pronotum bulging above anterior margin; body about 1.9× as long as wide; metasternum rounded front to back; length 2.7 mm; Brasil and Argentina *rudepunctatus* (Pic)
 - Metasternum not carinate; other characters not as above 13
- 13(12). Lateral elytral striae distinct at apex but not indicated at level of metasternum 14
 - Lateral elytral striae distinct at apex and weakly to clearly indicated at level of metasternum by shallow grooves or aligned punctures 20
- 14(13). Elytral apices distinctly produced, outline of elytral apex when see from above as a broad "W"; eyes separated by 1.7× ver-

- tical diameter of an eye; pronotum at side inflated; length 2.3 mm; Argentina *caudatus* (Pic)
- Elytral apices evenly rounded; otherwise not as above 15
- 15(14). Pronotum at side with large punctures only, separated on an average by more than diameter of a puncture, small punctures absent; head with large punctures only; eyes separated by 1.5× vertical diameter of an eye; length 2.6 mm; Brasil
..... *subplicatus* (Pic)
- Pronotum at side not as above; head not as above; eyes separated by 1.6–2.0× vertical diameter of an eye; Caribbean, Brasil, and Argentina 16
- 16(15). Abdominal sutures impressed and segments convex front to back; punctation at side of pronotum obscurely dual; length about 1.7 mm; Argentina *brevesulcatus* (Pic)
- Abdominal sutures not impressed, segments nearly flat front to back; punctation at side of pronotum clearly to obscurely dual; length 2.0–2.4 mm; Brasil and Caribbean 17
- 17(16). Mesosternal hooklike process produced posteriorly over metasternum; pronotum at side distinctly bulging; body red brown throughout; length 2 mm; Puerto Rico *insulicola* (Fisher)
- Mesosternal hooklike process not produced; otherwise not as above 18
- 18(17). Eyes larger, clearly bulging, separated by about 1.6× vertical diameter of an eye; punctation at side of pronotum obscurely dual, larger punctures but slightly larger than small punctures and less dense; length 2.0–2.5 mm; Guadeloupe *pierrei* (Lepesme)
- Eyes smaller, weakly bulging, separated by about 2× vertical diameter of an eye; punctation at side of pronotum clearly dual, large punctures much larger than small punctures and denser .. 19
- 19(18). Body primarily dark brown but with elytral apex, head, and abdomen more or less red brown; length about 2.4 mm; Brasil *reitteri* (Pic)
- Body primarily red brown but with metasternum a little darker than remainder; length about 2.0 mm; Guadeloupe
..... *minutissimus* (Pic)
- 20(13). Punctures of head clearly dual, of small, dotlike punctures and larger, rimmed punctures 21
- Punctures of head of 1 size, irregular in size, or obscurely dual 23
- 21(20). Elytra and abdomen reddish brown, remainder of body clearly darker; punctation of metasternum obscurely dual throughout; eyes separated by about 1.9× diameter of an eye; 2.9 mm; Argentina *argentinus* (Pic)

- Not exactly as above 22
- 22(21). Punctures at side of pronotum above anterior margin so dense that they are largely confluent; Brasil *brasiliensis* (Pic)
- Punctures at side of pronotum above anterior margin not running together; Argentina *sparsepunctatus approximatus* (Pic)
- 23(20). Punctures at side of pronotum dual, distinctly impressed and clearly of 2 sizes 24
- Punctures at side of pronotum obscurely dual, weakly impressed and not clearly of 2 sizes 28
- 24(23). Length about 4.0 mm; dark brown nearly throughout; apex of 5th abdominal segment narrowly produced; Brasil .. *convexus* (Pic)
- Length about 2.4–3.5 mm; red brown nearly throughout; apex of 5th abdominal segment not produced 25
- 25(24). Elytra with large punctures on disk showing no tendency to alignment in bands; eyes separated by 1.6–1.8× vertical diameter of an eye; length 2.8 mm 26
- Elytra with large punctures on disk showing weak to distinct tendency to alignment in bands; eyes separated by 1.8–2.4× vertical diameter of an eye; length 2.3–3.5 mm; various localities 27
- 26(25). Eyes separated by 1.6× vertical diameter of an eye; Brasil *cribratus* (Pic)
- Eyes separated by 1.8× vertical diameter of an eye; Peru *distinctipennis* (Pic)
- 27(25). Large punctures of elytral disk clearly forming bands or rows; large punctures of metasternum smaller, sparser laterally, not quite attaining side; metasternum behind anterior margin on each side of middle with a narrow, elongated fovea; length 2.7–3.5 mm; South America, Central America, and Caribbean *herbarius* (Gorham)
- Large punctures of elytral disk with a weak tendency to form bands; large punctures of metasternum abruptly stopping laterally and broadly absent from side; metasternum behind anterior margin on each side with 2 foveae, 1 nearly round, the other elongated; length 2.3 mm; Argentina *curtus* (Pic)
- 28(23). Dorsum primarily dark brown but nearly black at base of elytra and with elytral suture red brown; eyes separated by about 1.8× vertical diameter of an eye; ventral surface red brown; length about 2.7 mm; Argentina *subrutiliceps* (Pic)
- Body red brown throughout; otherwise not as above 29
- 29(28). Elytra with large punctures on disk showing a weak tendency to alignment in series; eyes separated by about 1.8× vertical diameter of an eye; 2.4 mm long; Argentina .. *longesulcatus* (Pic)

- Elytra with large punctures on disk showing no tendency to alignment in series; eyes separated by about $1.4\times$ vertical diameter of an eye; 2.8 mm long; Argentina *rufus* (Pic)

LIST OF SPECIES IN KEY, WITH SYNONYMY

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| <i>argentinus</i> (Pic), 1904c: 57. | <i>longesulcatus</i> (Pic), 1928b: 50. |
| <i>baeri</i> (Pic), 1904a: 19. | <i>minutissimus</i> (Pic), 1904d: 104. |
| <i>brasilienis</i> (Pic), 1902: 68. | <i>neltumae</i> (Fisher), 1942: 37. |
| <i>brevesulcatus</i> (Pic), 1927b: 187. | <i>pierrei</i> (Lepesme), 1947: 227. |
| <i>caudatus</i> (Pic), 1928b: 49. | <i>reitteri</i> (Pic), 1927a: 9. |
| <i>convexus</i> (Pic), 1902: 68. | <i>robusticollis</i> (Pic), 1922: 4. |
| <i>cribratus</i> (Pic), 1905a: 92. | <i>rubriventris</i> (Pic), 1904c: 57. |
| <i>curtus</i> (Pic), 1927a: 7. | <i>robustior</i> (Pic), 1923: 5. |
| <i>distinctus</i> (Pic), 1905a: 92. | <i>rudepunctatus</i> (Pic), 1904c: 57. |
| <i>distinctipennis</i> (Pic), 1904a: 19; | <i>rufus</i> (Pic), 1927a: 7. |
| White, 1973: 847. | <i>sparsepunctatus approximatus</i> |
| <i>fulvopilosus</i> (Pic), 1927a: 8. | (Pic), 1928a: 4. |
| <i>guyanensis</i> (Pic), 1923: 5. | <i>subplicatus</i> (Pic), 1927a: 9. |
| <i>herbarius</i> (Gorham), 1883: 207. | <i>subrutiliceps</i> (Pic), 1905b: 136. |
| <i>latipennis</i> (Pic), 1927a: 9. | <i>tabaci</i> (Guérin), 1850: 437. |
| <i>claveri</i> (Pic), 1923: 5. | <i>impressifrons</i> (Fall), 1905: 234. |
| <i>maroniensis</i> (Pic), 1927a: 8. | <i>puncticeps</i> (Gorham), 1886: 348. |
| <i>goudoti</i> (Pic), 1927a: 8. | <i>unisulcatus</i> (Pic), 1927b: 187. |
| <i>venezuelensis</i> (Pic), 1927a: 9. | <i>wagneri</i> (Pic), 1927b: 186. |
| <i>insulicolus</i> (Fisher), 1936: 240. | <i>major</i> (Pic), 1928a: 4. |
| <i>lepesmei</i> White, 1965a: 115. | |
| <i>estriatus</i> (Lepesme), 1947: 228. | |

LABEL DATA

Most data listed below are from types, but in the case of two Pic species, the data are from specimens identified by Pic but which do not bear type labels. Because of the apparent carelessness of Pic's work, the latter specimens may not represent the same species as his types (which could not be found). The species *baeri* and *major* have been worked into the key on the basis of these non-types.

I have noted discrepancies between published data and data on type-specimens.

The data refer to taxa that are either in the section on taxonomic notes or in the above key to species.

T. argentinus (Pic).—“S. Arg.; TYPE: Le Nat. no. 108, 1904, p. 57; *Cathorama argentina* Pic.” In the original description Pic gave “Buenos-Ayres (ex Baer).”

T. baeri (Pic).—“Sud-Peru, Hac. Huayuri, 28. 3. 1936.; [upside down label

- that conflicts with the previous one]; Gestr. von Tonus; 804; [a folded up label]; *Cathorama baeri* Pic [an undecipherable word]." The specimen bearing these data is not the type; the species was described in 1904, so the type could not have been collected in 1936.
- T. brasiliensis* (Pic).—"Jatahy, Prov. Goyas, Brésil; Le Nat. No. 361, 1902, p. 68; type; TYPE detriat: *Cathorama brasiliensis* Pic."
- T. brevesulcatus* (Pic).—"Decembre; Rep. Argent.; type; TYPE: *brevesulcata* Pic."
- T. caudatus* (Pic).—"Corumba, Matt Grosso; type; TYPE; *C. caudata* n. sp." Pic, 1928b: 49, gave the data as "Sierras de Córdoba: Alta gracia, 13.II.1927 (C. Bruch).—Brésil: Corumba."
- T. convexus* (Pic).—"Serra da Bernada (Pernambuco), Duhant 5. 6. 1894; TYPE; *Catorama convexa* Pic." In the original description Pic gave the data as "Serra de Bernada (Pernanbuco)."
- T. cribratus* (Pic).—"Tijuca (Brasil); Le Nat. No. 435, 1905, p. 92; type; TYPE; *cribrata* Pic."
- T. curtus* (Pic).—"B. Ayres; Rep. Argentina, Prov. Buenos Aires, 190, C. Bruch; type; TYPE; *curta* n. sp."
- T. distinctipennis* (Pic).—"Pérou, Prov. Otuzco, Choouisongo 2100, G. A. Baer. 3-1900; Type; TYPE; *Eupactus distinctipennis* Pic."
- T. distinctus* (Pic).—"S. Antonio da Barra, Pr. de Bahia, Gounelle 11-12.88; Le Nat. No. 435, 1905, p. 92; type; TYPE; v. *distincta* Pic."
- T. estriatus* (Lepesme) = *lepesmei* White.—"Museum Paris, Guadeloupe, Leo Dufau 1913; 1180, Anobieii; [undecipherable label]; TYPE; *Catorama estriatum mihi*, type, P. Lepesme det."
- T. fulvopilosus* (Pic).—"Jatahy, GOYAZ; TYPE; *fulvopilosa* n. sp."
- T. guyanensis* (Pic).—"Septembré; Guyane Francse, Nouveau Chantier, Collection le Moul; *C. guyanensis* n. sp."
- T. insulicola* (Fisher).—"Scirpus validus, Kiz Rd. No. 36, Ponce P.R., Coll. 21 Aug. '33, R. G. Oakley; San Juan #4506; Type No. 57595 U.S.N.M." There was an error by Fisher in transmitting the type data, because the original description gave "collected on "hucar" on beach, Tallaboa road near Ponce, P.R., August 21, 1933, by R. C. Oakley (I No. 4506)."
- T. longesulcatus* (Pic).—"Rio Salado, R. argent.; type; TYPE; *argentina longesulcata* Pic." In the original description Pic gave the collection data as: Santiago del Estero: Rio Salado (Wagner, in coll. Pic).
- T. major* (Pic).—"Cordoba Argentina, Dep. de Calamuchita, El Sauce, XII-1938; Manuel J. Viana; *major* Pic." This specimen clearly cannot be the type, for the species was described in 1928.
- T. maroniensis* (Pic).—"Juin; Guyane Francaise, St-Jean du Maroni; Coll. Le Moul; TYPE: *maroniensis* n. sp."

- T. minutissimus* (Pic).—“Tijuca (Rio), Bresil, E. Gounelle, 12, 1884; Le Nat. No. 412, 1904, p. 103; type; TYPE; Cathorama minutissima Pic.”
- T. neltumae* (Fisher).—“P.R. Acc. No. 812-40, Guanica, P.R., 12-5-40; L.F. Martorell Collectors [sic]; From seed pods of *Neltuma juliflora*; Type No. 64849 U.S.N.M.; Catorama neltumae Fisher.” In the original description the type number is given as 55676. The USNM type catalog has the data for *neltumae* entered under both the numbers 55676 and 64849. The second number is not needed, so the first number should be accepted as the correct one.
- T. pierrei* (Lepesme).—“Guadeloupe, Vitrac; TYPE; Catorama Pierrei mihi, TYPE, P. Lepesme det.” The original description gives the locality as “Trois-Rivieres.”
- T. reitteri* (Pic).—“Blumenau, S.O. Brasilien, (Reitter); Reitteri n. sp.” These data are all this specimen bears, so because it is not clearly labeled as type, I have added a LECTOTYPE label to it, and so designate it.
- T. robusticollis* (Pic).—“Republ. Argentina, Chaco de Santiago, Del Estero [sic], Rio Salado; type; TYPE; robusticollis n. sp.”
- T. robustior* (Pic).—“Type; C. robustior n. sp.” In the original description the locality of collection is given as “Guyane Fr.,” but there is no such label on the pin holding the specimens. Pic, 1928a: 4, gave the locality of collection for *robustior* as “R. Argentina.”
- T. rubriventris* (Pic).—“Mexique; type; Le Natur, No. 408, 1904, p. 57; TYPE.”
- T. rudepunctatus* (Pic).—“Bresil, Jatahy; type; Le Natur. No. 408, 1904, p. 57; TYPE; Cathorama rudepunctata Pic.”
- T. rufus* (Pic).—“Mon—[undecipherable]; n. sp.—[undecipherable]; type; TYPE Catorama rufa Pic.” The crudely scribbled labels on the pin are difficult to impossible to read. In the original description Pic gave the locality of collection as “Rep. Argentine.”
- T. sparsepunctatus approximatus* (Pic).—“Janvier; Republ. Argentine, Chaco de Santiago Del Estero. Rio Salado; Collection Wagner; TYPE; sparsepunctata v. approximata Pic.”
- T. subglaber* (Pic).—“1960; Mexique; type; Cathorama v. subglaber Pic; TYPE.”
- T. subplicatus* (Pic).—“S. Antonio, Bresil; type; TYPE; subplicata n. sp.”
- T. subruticeps* (Pic).—“Gov. Chubut, (Bruch); type; TYPE; Cathorama subruticeps Pic.” In the original description Pic gave the data as “Gov. Chubut (coll. Bruch et Pic).” The spelling published was *subruticeps*.
- T. unisulcatus* (Pic).—“Bresil, (Gounelle); type; TYPE; unisulcata n. sp.”
- T. wagneri* (Pic).—“Rep. Argentina, Choco de Santiago del Setera Rio Dulce [sic]; TYPE; wagneri n. sp.”

SPECIES OF UNCERTAIN STATUS

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| <i>gossypii</i> (Brèthes), 1924: 67. | <i>robustior caucaensis</i> (Pic), 1927a: 8. |
| <i>goyosensis</i> (Pic), 1905a: 92. | <i>sallei</i> (Guérin), 1851: cxv. |
| <i>humeralis</i> (Kirsch), 1874: 401. | <i>sparsepunctatus</i> (Pic), 1928a: 4. |
| <i>instriatus</i> (Pic), 1923: 5. | <i>s. rudectepunctatus</i> (Pic), 1928a: 4. |
| <i>instriatipennis</i> (Pic), 1923: 6. | <i>substriatus</i> (Pic), 1905b: 136. |
| <i>minutus</i> (Pic), 1923: 5. | <i>thecaoides</i> (Pic), 1904d: 103. |
| <i>peruvianus</i> (Kirsch), 1874: 401. | <i>zeae</i> Waterhouse, 1849: lxxviii. |

The above names cannot be assigned because their descriptions do not adequately characterize them, and no readily identifiable types or specimens are available. The situation in regard to most of these species and subspecies deserves detailed comments.

The type of *goyosensis* (Pic) is evidently lost. My examination of Pic's box of *Catorama* types showed that five types were missing from their cards and were likely among the loose beetles in the bottom of the box. Clues found (bits of glue on specimens that fit with glue on cards; specimens with areas denuded of pubescence that matched glue impressions on cards, etc.) allowed four of these types to be returned to their proper cards. However, I was not able to find the type of *goyosensis*. The metasternum and legs of the type were on the card, but the remainder of the beetle was not among the beetles and debris on the bottom of the box. The spelling *goyosensis* is given in the original description; however, Pic, 1912: 69, and Blackwelder, 1945: 405, give the spelling *goyasensis*.

Though I thoroughly searched Pic's very badly crowded box of *Catorama* and closely examined the debris in the bottom of the box, I did not find the types of his other 8 species and subspecies listed above.

Pic, 1923: 5, after the description of *Catorama instriata* n. sp., presented the following: "Le *C. minuta* mihi, du Chili, est plus petit, nettement rétréci en arrière, peu pubescent." It would appear that Pic here intended to refer to a species he previously described; however, there is no evidence of a previous reference to the name *minuta*, and it is doubtful that there is such a reference. It would seem that we have only these few words by which to recognize "*minuta*."

Pic, 1923: 6, after the description of *Catorama guyanensis* n. sp., gave the following: "Le *C. instriatipennis* mihi, du Brésil, très voisin du précédent, est un peu plus pubescent et a, sur les élytres, quelques points plus gros sur un fond finement et assez densément ponctué." As with *minuta* (above) Pic probably intended this to be a reference to a previously described species; however, there is no evidence to indicate that this name had actually been validated previously. We thus have a second species name validated through carelessness and which can likely never be assigned.

Species that Pic placed in *Catorama* which do not appear in the lists

above have been dealt with in other publications (White, 1979a, 1979b, 1980).

The description of *Catorama humeralis* Kirsch mentions parallel, impressed lines at the side of the elytra behind the middle. This makes it likely that the species is actually a member of *Tricorynus*. However, the description of *C. peruviana* Kirsch states that the elytral disk is striate, and this indicates that the species is probably a member of *Stichtoptychus*.

Lepesme, 1947: 226–228, treated, in addition to the two species listed above, two other species in *Catorama*. I have seen the type of *C. dufau* Pic, 1911: 183, and have transferred this species to *Stichtoptychus* (White, 1980). The other species that Lepesme treated was *sallie* Guérin, which is not recognizable from Lepesme's notes or from the description that Guérin offered for it.

It is likely that *T. zae* Waterhouse is a senior synonym of *T. tabaci* Guérin. I compared a specimen of *tabaci* with the description of *zae* and found it to agree closely. The body length Waterhouse gave for his specimens (number not given) of *zae* ($1\frac{3}{4}$ to 2 lines = 3.69 to 4.23 mm) compares well with the length for 37 specimens of *tabaci*, namely 3.4–4.6 mm. However, a troubling aspect of the description of *zae*, and one which raises some doubts as to whether *zae* is identical with *tabaci*, is the lack of reference to black, very coarsely punctate depressions on the head. These are prominent features of *tabaci* and should not have been overlooked if the species were the same as *tabaci*. In fact, *tabaci* is the most readily recognized species of the entire genus due to these punctate depressions. *Tricorynus zae* was recorded by Waterhouse as feeding on corn; *tabaci* is known to feed on a variety of materials, including garlic, divi-divi seeds, dry herbs, ramie dry stem, popcorn, dried pepper, and *Crataegus meriana*.

During work on the revision of *Tricorynus* (White, 1965b), I wrote to the British Museum of Natural History in an attempt to locate the type of *T. zae*. E. B. Britton attempted without success to locate the type-series and stated that if the specimens exist they should be in the British Museum; since they were not found, there is slight chance that they can now be located.

ACKNOWLEDGMENT

My thanks are extended to Jean Menier of the Muséum National d'Histoire Naturelle in Paris for loan of types from the collection of Maurice Pic.

LITERATURE CITED

- Blackwelder, R. E. 1945. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Pt. 3. U.S. Natl. Mus. Bull. 185: 343–550.
- Brèthes, J. 1924. Quelques insectes du Paraguay. Rev. Chil. Hist. Nat. 28: 67–72.
- Fall, H. C. 1905. Revision of the Ptinidae of Boreal America. Trans. Am. Entomol. Soc. 31: 97–296.

- Fisher, W. S. 1936. Anobiidae. In Wolcott, G. N. "Insectae boringuensis." J. Agric. Univ. P. R. 20(1): 238-242.
- . 1942. New Coleoptera from Puerto Rico. J. Agric. Univ. P. R. 25(4): 37-39.
- Gorham, H. S. 1883. Family Ptinidae. In *Biologia Centrali-Americana*. Insecta. Coleoptera. 3(2): 194-209.
- . 1886. Supplement to Malacodermata. In *Biologia Centrali-Americana*. Insecta. Coleoptera. 3(2): 313-360.
- Guérin-Méneville, F. E. 1850. Enumération des insectes qui consomment les tabacs. Rev. Mag. Zool. 2(2): 426-442.
- . 1851. (Notes on *Catorama* with two new species). Bull. Soc. Entomol. Fr. 9(8): cxv.
- Kirsch, T. 1874. Beitrage zur Kenntniss der Peruanischen Käferfauna auf Dr. Abendroth's Sammlungen basirt. Berl. Entomol. Z. 17(3-4): 339-418.
- Lepesme, P. 1947. Bostrychoidea. In Fleutiaux, E. et al., Coléoptères des Antilles, Fauna de l'Empire France, VII, Vol. 1. pp. 194-233.
- Pic, M. 1902. Diagnoses de Coléoptères nouveaux. Le Natur. 24(361): 68.
- . 1904a. Diagnoses de seize Coléoptères exotiques appartenant a diverses familles. L'Échange 20(231): 18-20.
- . 1904b. Essai dichotomique sur les *Eupactus* Lec. et genres voisins, du Brésil. L'Échange 20(233): 36-38.
- . 1904c. Description de Coléoptères nouveaux. Le Natur. 26: 56-57.
- . 1904d. Description de Coléoptères nouveaux. Le Natur. 26: 103-104.
- . 1905a. Descriptions de Coléoptères exotiques nouveaux. Le Natur. 27: 92-93.
- . 1905b. Ptinus et Anobiides nouveaux de la Republique Argentine recueillis par M. Carlos Bruch. Rev. Mus. La Plata 12: 135-136.
- . 1911. Coléoptères exotiques nouveaux ou peu connus. L'Échange 27(323): 181-183.
- . 1912. Anobiidae. In *Coleopterorum Catalogus*, W. Junk, Berlin 10(48): 1-92.
- . 1922. Nouveautés diverses. Mél. Exotico-Entomol. 34: 1-32.
- . 1923. Nouveautés diverses. Mél. Exotico-Entomol. 39: 3-32.
- . 1927a. Nouveautés diverses. Mél. Exotico-Entomol. 48: 1-32.
- . 1927b. Nouveaux Coléoptères du globe. Bull. Soc. Zool. Fr. 52: 185-189.
- . 1928a. Notes et descriptions. Mél. Exotico-Entomol. 51: 1-36.
- . 1928b. Nouveaux Coléoptères de la République Argentine. Rev. Soc. Entomol. Arg. 2(1): 49-52.
- Waterhouse, G. R. 1849. (Two insects from Barbados). Proc. Entomol. Soc. London. Pp. lxxviii-lxx.
- White, R. E. 1965a. Taxonomic and distribution notes on Anobiidae (Coleoptera). Coleop. Bull. 19(4): 113-116.
- . 1965b. A revision of the genus *Tricorynus* of North America (Coleoptera: Anobiidae). Misc. Pubs. Entomol. Soc. Am. 4(7): 285-368.
- . 1967. The *Tricorynus* of Mexico (Coleoptera: Anobiidae). Trans. Am. Entomol. Soc. 93: 1-40.
- . 1973. Neotropical Anobiidae: New genera and species, and taxonomic notes (Coleoptera). Ann. Entomol. Soc. Am. 66(4): 843-848.
- . 1974. The Dorcatominae and Tricoryninae of Chile (Coleoptera: Anobiidae). Trans. Am. Entomol. Soc. 100: 191-253.
- . 1979a. The genus *Protheca* of the Americas (Coleoptera: Anobiidae). U.S. Dep. Agric. Tech. Bull. 1605, 24 pp.
- . 1979b. New synonymy and new combinations primarily in American taxa (Coleoptera: Anobiidae). Proc. Entomol. Soc. Wash. 81(2): 211-218.
- . 1980. A taxonomic study of the new world genus *Stichtoptychus* Fall (Coleoptera: Anobiidae). U.S. Dep. Agric. Tech. Bull. 1602, 35 pp.